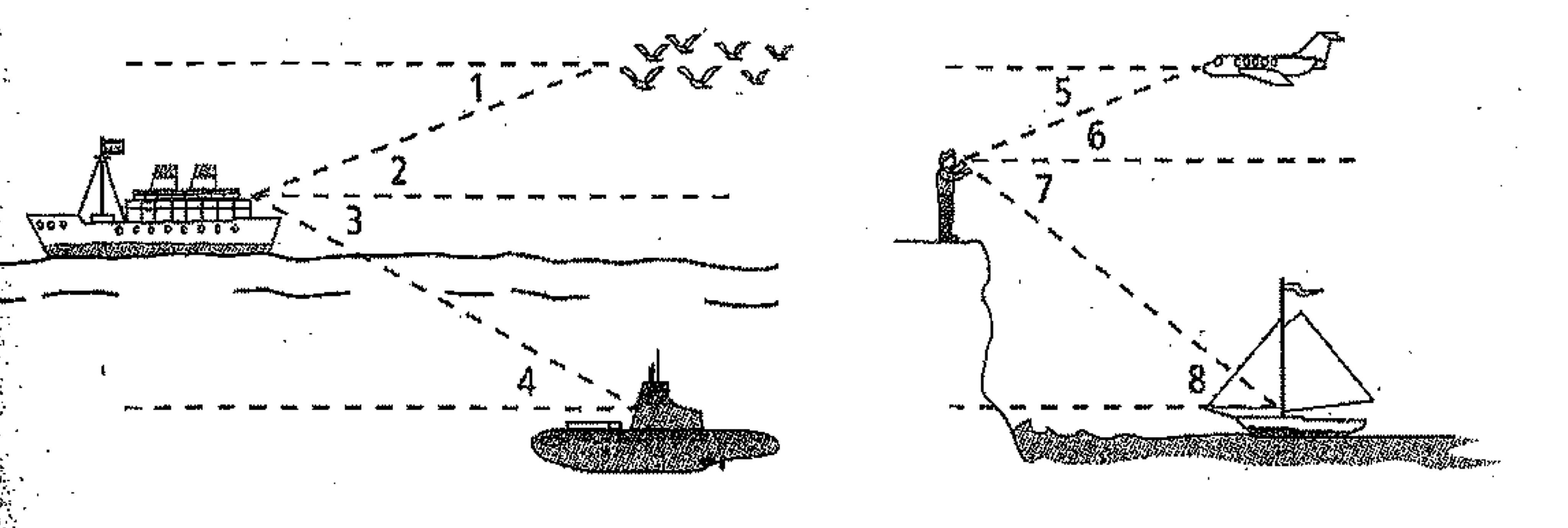
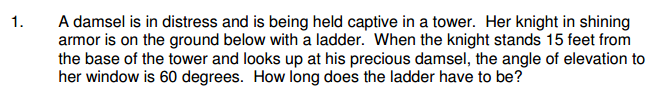
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**6.4 Trigonometry Word Problems**

Notes:





1. Ben is flying a kite directly over his buddy Franklin, who is 125 meters away. The kite string makes a 39o angle with the ground (which is level). How high is the kite?

2. Juliet is standing atop a 15-foot balcony when she spots Romeo at an angle of depression of 5o. How far away is Romeo from the base of the balcony?

3. A park ranger, on top of a 200-foot tower, spots a wolf at an angle of depression of 14o. How far is the wolf from the base of the tower? (Note: The ground is level.)

4. A 20-foot ladder leans against a house, making a 75 degree angle with the ground.  How far above the ground is the top of the ladder?

5. A boy stands 50 feet away from a building, and looks up at the top of the building with an angle of elevation of 65 degrees.  How tall is the building?

6. A bomber flies 1000 meters above the ground, and sees its target below with an angle of depression of 42 degrees.  How many more horizontal meters should the plane travel before dropping its bomb (assuming it will drop straight down)?









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